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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/314,052 05/18/99 OTT

D 15006.0009

EXAMINER

QM32/0216

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ATLANTA GA 30303-1811

THOMPSON, M

ART UNIT

PAPER NUMBER

3763
DATE MAILED:

02/16/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/314,052	Applicant(s) OTT ET AL.	
	Examiner Michael M. Thompson	Art Unit 3763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) 39-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-38 and 55-71 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims 1-71 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- | | |
|---|--|
| 15) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 16) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6</u> | 20) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-38 and 55-71, drawn to an apparatus for treating a gas , classified in class 604, subclass 83.
 - II. Claims 39-54, drawn to a method for treating a gas for delivery to an animal, classified in class 604, subclass 500.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II. and I. are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as humidifying the air in a forced air, home heating system.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Andrew Floam on 02-09-2001 a provisional election was made with traverse to prosecute the invention of I., claims 1-38 and 55-71.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 39-54 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

6. The disclosure is objected to because of the following informalities: On page 4, line 27 the applicant states, "As used in the claims, 'a' can mean one or more." The use of "A" denotes singularity. It is understood that the applicant is his or her own lexicographer when defining the metes and bounds of the claimed invention. However, while a term used in the claims may be given special meaning in the description of the invention, generally no term may be given a meaning repugnant to the usual meaning of the term. *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). Appropriate correction is required.

Claim Objections

7. Claim 1 is objected to because of the following informalities: Claim 1 shows two paragraphs in the body of the claim labeled (a) and (c). It appears that it was the Applicant's intention to label the second paragraph as (b). Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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9. Claims 1-31 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 1 recites the limitation "the inlet" in section a, line 2,3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-5, 12, 13, 19-34, 38, 55-64, 70, and 71 are rejected under 35 U.S.C. 102(b) as being anticipated by Ott et al. (US Patent No. 5,411,474). Ott et al. teaches an apparatus for treating a gas comprising a housing defining one chamber having an entry port and an exit port, the chamber that contains a volume of liquid in fluid communication with the insufflator, a humidifying means, a container/reservoir, the device comprising an opening, and a port for filling the container/reservoir, and at least one layer of filter/membrane in the chamber for filtering the gas, water retaining layers and the pre-charging of those layers. He teaches the use of DC power, humidity sensing means and monitoring means (column 10) to sense and monitor the relative humidity of the gas and act accordingly to maintain that humidity and/or temperature. Ott et al. teaches the use of capacitors and resistors for the humidity sensing means, an operational amplifier, a control means for controlling electrical power, all allowing for

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simultaneous heating and hydration. In Figure 3, shows a concentric circle configuration for the electrical resistive wire that makes up the heating means. (Please review columns 5-10 of the Ott patent.) Please note that it is the Examiner's position that most electrical cable is insulated.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 6-11, 14-18, 31, 35-37, and 65-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ott et al in view of Absten. Ott et al. teaches all of the limitations of the claims except for a microcontroller, an alarm means that is audible or visual, a plurality of water-retaining layers, an AC/DC converter, an electrical housing for monitoring means, and an insulated cable with removable connector. Absten teaches a microcontroller that will "typically" be used to monitor the pressure of the gas, thereby rendering it capable of monitoring humidity levels of gas. Absten also teaches an alarm mechanism that, "may take the form of an internal 'alarm' in which pressure (for example) would be measured but not displayed for the operator unless problems are detected." (column 5, line 29-32) It would have been obvious to one of ordinary skill in the art, at the time of invention, to combine the modified apparatus of Ott et al. with the microprocessor of Absten to monitor the level of humidity of the gas for the purpose of indicating when the gas drops below a preset, critical relative humidity threshold or to allow for the activation of an alarm. It also would have been obvious to combine an alarm mechanism as

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taught by Absten to the modified apparatus of Ott et al to notify the user of any "problems that are detected." Please note it would be obvious to make an "alarm" of either audio or visual construction to effectively notify a user of problems. It would also be obvious to add an AC/DC converter to make the power source to the apparatus more versatile in differing environments. It is further obvious to contain a monitoring and/or sensing means in a electrical housing to eliminate electrocution, including the usage of an insulated electrical cable with removable connector for the prevention of electrocution and versatility. Please note that it is the Examiner's position that backup containers/reservoir for additional liquid would be well known in the art and/or simply a duplication of parts to provide an abundance of liquid to be humidified in the event that a medical procedure may take an extended amount of time, to ensure that there is a sufficient amount of liquid to last the entire procedure.

15. Claims 6 is rejected since Ott et al. teaches all the limitations of the claims except for comprising a plurality of water-retaining layers, the humidity sensing means being disposed in the chamber downstream of the heating means. It would have been obvious to one having ordinary skill in the art, at the time of invention, to add a plurality of water retaining layers to the invention of Ott et al. since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. The addition of a plurality of water-retaining layers would increase the quality of filtering, and/or humidification.

16. In case Applicant doesn't agree that column 10 of the Ott et al. patent clearly indicates the use of a humidity sensing means downstream of the heating means, it would have been an obvious matter of design choice as disclosed by Ott et al to dispose the humidity sensing means in the chamber downstream of the heating means. Ott et al teaches placing of the heat sensing

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means downstream of the heating means, therefore placing the humidity sensing means downstream of the heating means would be an obvious design choice in obtaining more accurate information of the gas exiting the chamber.

17. Claims 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ott et al. and Absten as applied to the claims above, and further in view of Baier. Ott et al. and Absten teach all of the limitations of the claims except for an analog-to-digital converter. Baier teaches a monitoring and/or sensing means that indicates a value in a digital or analog manner. The teachings of Baier clearly indicates that his device can provide the information as a digital or analog representation, meaning that conversion of analog to digital is possible. It would have been obvious to one of ordinary skill in the art, at the time of invention, to have combined the teachings of Baier with the modified apparatus of Ott et al to include a digital means for representation of the temperature of the gas. Please note that a digital word representation as a means of indicating the temperature, would have been obvious since it would make notification of temperature to the user more apparent and immediate.

Double Patenting

18. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. Claims 11-5, 12, 13, 19-34, 38, 55-64, 70, and 71 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 5,411,474. Although the conflicting claims are not identical, they are not patentably distinct from each other because it is the Examiner's position that these claims are substantially similar in teaching teaches an apparatus for treating a gas comprising a housing defining one chamber having an entry port and an exit port, the chamber that contains a volume of liquid in fluid communication with the insufflator, a humidifying means, a container/reservoir, the device comprising an opening, and a port for filling the container/reservoir, and at least one layer of filter/membrane in the chamber for filtering the gas, water retaining layers and the pre-charging of those layers. It teaches the use of DC power, humidity sensing means and monitoring means (column 10) to sense and monitor the relative humidity of the gas and act accordingly to maintain that humidity and/or temperature. Ott et al. teaches the use of capacitors and resistors for the humidity sensing means, an operational amplifier, a control means for controlling electrical power, all allowing for simultaneous heating and hydration.

20. Claims 1-6, 12-38, 55-65, 70, and 71 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-42 of U.S. Patent No. 6,068,609. Although the conflicting claims are not identical, they are not patentably distinct from each other because the both teach teaches an apparatus for treating a gas comprising a housing defining one chamber having an entry port and an exit port, the chamber that contains a volume of liquid in fluid communication with the insufflator, a humidifying means, a container/reservoir, the device comprising an opening, and a port for filling the container/reservoir, and at least one layer of filter/membrane in the chamber for filtering the gas,

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water retaining layers and the pre-charging of those layers. He teaches the use of DC power, humidity sensing means and monitoring means (column 10) to sense and monitor the relative humidity of the gas and act accordingly to maintain that humidity and/or temperature. Ott et al. teaches the use of capacitors and resistors for the humidity sensing means, an operational amplifier, a control means for controlling electrical power, all allowing for simultaneous heating and hydration.

Contacts

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael Thompson whose telephone number is (703) 305-1619. The Examiner can normally be reached on Monday through Friday from 9 am to 5 PM.

Any questions pertaining to informal matters such as the status of a case, missing portions of an Office Action, references, filing, paper matching, etc., should be directed to the Examiner's Legal Instruments Examiner (LIE), Rosalind Smith, at (703) 305-2440.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Primary, AnhTuan Nguyen, can be reached on (703) 308-2154. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4520.

Michael M. Thompson

Patent Examiner

ANHTUAN T. NGUYEN
PRIMARY EXAMINER
2/12/01.

MT *MT*

February 11, 2001